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Dijk, Henk van

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THE DEVELOPMENT OF THE SERVICE SECTOR IN GERMANY AND THE NETHERLANDS A COMPARISON

HENK VAN DIJK (*)(1)

Abstract: In the science of economics it is a general thought that a developing economy would enter three phases. In the first phase the majority of the occupational population would find employment in the agricultural sector. During the second phase the pith of the occupational population is shifted to the industrial sector. In the last phase a definite shift to the tertiary or service sector would take place. However, this manner of thought is exposed to more and more criticism. Despite predictions of the contrary, the economical development in 'third world' countries has been enacted according to this pattern. Also, through further research it has been determined that in far from all industrialized countries the process of economical development has progressed as literally. Only a few European countries have developed accordingly. In highly industrialized countries, such as Japan and the United States of America, as well as many undeveloped countries, the service sector was of old more important for employment than that the industry was. Therefore one may wonder if the above-mentioned development model could not be considered as specifically European, rather than general. Moreover, with this confirmation one must realize that we are sooner concerned here with a West-European model and that within Western Europe a number of countries did not comply with the pattern. In this article a comparison is made between the development of the service sector in the Netherlands and that of Germany. Why these two countries are so interesting is because the Netherlands was thought to be a trading nation and Germany a country that industrialized very rapidly in the 19th century.

I. The Debate on the Rise of the Service Sector: The Origins

The first article on the importance of the tertiary sector appeared in 1933, in the middle of the disastrous Depression which paralysed the Western economy following the 1929 Crash. It was written by the New Zealand economist A.G.B. Fisher and published in The Economic Journal, Keynes' quarterly journal.(2) Fisher argued that investors were expecting too much from the recovery of the traditional sectors: agriculture and industry. According to Fisher, as an economy developed and wealth increased, the demand for goods which satisfied primary needs declined in relative

(*) Address all communications to: Henk van Dijk, Erasmus Universiteit, Centrum voor Maatschappig - Geschiedenis, Postbox 1738, Rotterdam, Niederlande.

terms and the satisfaction of secondary needs became more important. This process had taken place in the Western economy in the 19th century, when agriculture declined in significance and industry experienced an explosive growth in some countries. Fisher asserted that the Depression of the 1930s marked the beginning of a new stage. As most of the secondary needs were already satisfied in the developed countries it was not to be expected that the recovery would be brought about by that sector. Tertiary products - facilities for travel, amusements of various kinds, personal and intangible services, flowers, music, art, literature, science, philosophy and the like - were now becoming important. With or without government assistance (Fisher had a eye on the Soviet Union which was rapidly industrializing at that time) investment had to be directed towards this new sector, if one was to climb out of the trough. Fisher did not equate tertiary with services. For example he included the printing industry in the tertiary sector, as well as a number of other modern branches of industry.

Colin Clark's now classic work The Conditions of Economic Progress was published a few years later, in 1939. In a chapter which did not receive much attention at first he wrote that, as technology advanced, the labour force shifted from the agricultural to the industrial sector and then to the service sector. From the distribution of the labour force over these sectors one could, as it were, establish the position of an economy in the progression process. Countries which had a strong industrial sector with only a small proportion of their labour force employed in the service sector were in the second stage.

In most countries of the world the labour force was concentrated in the agricultural sector, which meant that they were still in the first stage of economic development. Clark did not wish to interpret this succession of stages too rigidly. For example, he made an exception in the case of India, where British penetration had resulted in the disappearance of the domestic textile industry and, hence, in a rise in the proportion of the labour force in agriculture. Nonetheless, his theory is usually interpreted fairly strictly.

Clark sought the explanation for this development by sectors in the differences in the productivity of labour in agriculture, industry and services. As the productivity of labour in agriculture rose sharply as a consequence of mechanization, labour was released for industry. In turn, labour was released from the industrial sector by mechanization and put to work in the labour-intensive service sector. Clark did not deny that productivity could also increase in the service sector, and named supermarkets as an example. However, as long as the demand for services rose faster than productivity more and more people would be needed in this sector. This contrasted with the situation in industry, where progressive mechanization caused productivity to increase at a rate which could not be matched by demand resulting in the shedding of labour.(3)

We find the theories of Fisher and Clark incorporated in Le grand espoir du XXe siècle by the French sociologist Fourastié, which appeared a few years after the Second World War (1949). Fourastié held out a rosy future to crippled Europe. After a few decades, as wealth increased (Fisher) and productivity in agriculture and industry rose faster than the demand for their products (Clark), the major part of the labour force would be engaged in the production of tertiary goods. He foresaw a society of material abundance in which mankind could concentrate on such things as art, culture and science. The world was moving from an 'équilibre ancien', the old agrarian society, towards an 'équilibre futur', from a 'civilisation primaire' to a 'civilisation tertiaire'. The industrial stage was merely a 'période transitoire'. full of misery and social tensions. As the most serious product of this was National Socialism.

The World War brought about by National Socialism had delayed but not prevented the arrival of the tertiary society.(4)

The theories of Fisher, Clark and Fourastié, the fathers of the debate on the rise of the service sector(5), have been subjected to serious criticisms over the years. For example, neither Clark nor Fisher had been very clear as regards their definitions of the terms 'services' and 'tertiary'. It was pointed out to Fisher that typically tertiary

matters such as education and medical facilities were not necessarily of importance only to the tertiary sector. Again, one can think of all sorts of luxury foods and crops which are anything but 'primary'. It is also questionable whether the distinction between primary, secondary and tertiary products is the same at all times and in all places. As Wolfe wrote in 1955: 'What is essential for Robinson Crusoe is not always essential for us'.(6)

The core of Clark's theory is the productivity of labour. Like many after him, however, he got caught in his own contradictions when he saw low productivity as being, by definition, the characteristic of the service sector. This forced him to assign the old artisanal activities to the service sector, transport to the secondary sector and the building industry, again, to the service sector. Equating high productivity with secondary and low productivity with tertiary means that certain economic activities can change sector.

Wolfe, for example, wanted tertiary products to be confined to those products which are dependent on 'human skill'. 'We have no reason for believing that the physical strength or mental dexterity of the human animal has changed since Cro-Magnon times'.(7) In my view, this statement typifies the deficient historical sense which shown by economists such as Wolfe when approaching this problem. They endeavour to define the service sector as a labour-intensive sector and are therefore obliged from time to time to exclude particular service occupations and companies.

According to this definition, the banks would now have to be excluded from the service sector. Similarly, the laundries, which constituted a very modern and expanding branch in the interwar years, would never have belonged to the service sector. Wolfe did want to face up to the technological dynamics of the services, despite the fact that he was aware of the existence of 'complex IBM machines'. Even a service sector specialist like Fuchs first deprives the sector of its more dynamic branches, notably transport, and then goes on to explain why productivity is so low in the services. In general, however, the term 'service' is taken to mean the production of intangible goods. At most an exception is made in the case of transport. This is so clearly a service that it must be included in the service sector.(8)

The remarkable growth in the numbers employed in the tertiary sector in the 1950s and 1960s gave new impetus to the debate. Though still small by comparison with industry, the number of publications on this sector increased greatly. Especially important was the fact that the highly heterogeneous service sector, to which 'both the monk and the whore'O) belong, was split up. Katouzian drew a distinction between old, new and complementary services. By old services he meant chiefly the domestic services, in which fewer and fewer people found employment because of the large-scale sale of washing machines and other household appliances. The new services were those made accessible to a large public for the first time by the emergence of the affluent society: recreation, education, medical facilities and social care. The complementary services were those which served industry: banking, insurance, trade, transport, etc.(10) This distinction had already been made in an incidental manner by Clark, who was also aware that services to industry fulfilled a different function in the economy than services to the consumer.(11) Katouzian, however, attempted to trace the theoretical consequences of this distinction. The complementary services were dependent on the developments in industry. If the industrial sector gradually became less important, so too would the complementary services. On the other hand, rising prosperity would result in an ever greater demand for new services. This growth would be so strong that it would not be impeded by the declining importance of the old services.(12)

A basic assumption of many economists, even in the 1960s, was that the productivity of labour in the service sector would rise only slowly. At that time personnel problems meant that there was a shortage of personnel.(13) In analyses of unemployment the emphasis was placed on structural unemployment, which was a consequence of temporary circumstances. Cyclical unemployment faded into the background. Optimism prevailed. In 1968, for example, Fuchs wrote that the rise of the service sector would safeguard the United States against domination by big corporations. Most

service companies, after all, were fairly small. This would also diminish the 'alienation' which many people feared. Thanks to the rise of the service sector, fewer people would have to do heavy work, which meant that older people and women, in particular, would be able to find jobs in the sector.

Another distinctive feature of the sector according to Fuchs was that it was not very sensitive to the business cycle in terms of employment, because in poorer times production fell without people losing their jobs. The reason was that the sector usually contained a great many self-employed people (shopkeepers, hairdressers, estate agents, architects, publicans, lawyers, accountants, etc.): 'The stability of service employment over the business cycle results in considerable cyclical instability in output per man'.(14) A high degree of certainty as regards employment also prevailed in the services provided by the government (science, medical and social services, education). Just as capital, i.e. machinery, etc., was fixed in industry, labour was fixed in these services. It was labour, not capital, which fell under the fixed rather than the variable costs.(15) Thus, Fuchs foresaw a time when more selfemployed, women and older people would be working, in which there would be less alienation and big business would have less power.

II. **Recent Trends**

These prospects were disturbed by the economic setback in the 1970s. The service sector proved not to be an inexhaustible source of jobs. Moreover, in this sector too, it was found to be possible to greatly increase the productivity of labour. The best known example is automation in banking. It also became clear that industry was capable of producing goods which could replace services; washing machines, vacuum cleaners, motor cars, television sets, radios and, more recently, videos enable the consumer to produce his own services.

Inspired especially by these examples, Gershuny, in 1978 gave his work the ironic subtitle: Towards a self-service Economy?(16) A study of the British service sector showed that the rise in productivity in transport, banking, insurance and trade since 1950 had not been inferior to that in agriculture and industry.(17) This meant that the old view of things as formulated by Clark., etc. was in need of a thorough overhaul. In 1983 Gershuny and Miles published their important study on the New Service Economy, in which they analysed the effects of the new information technology (IT) on employment. A brief summary of their findings is in order here.(18)

In the old model of Clark and others, employment in the service sector would increase at the expense of that in agriculture and industry because of two developments: a growing demand for tertiary products and a limited increase in the productivity of labour in the services. Fuchs had already pointed out that the demand for tertiary products as envisaged by Fisher was not such that it could explain the shift in employment towards the third sector. Durable consumer goods (cars, washing machines, etc.) were replacing employment. According to Miles and Gershuny, this was possible only because the necessary infrastructure had been created for these things: a road network, electricity and water supplies. While households were increasingly producing their own services, companies shed activities to producer services with the result that a shift was taking place towards services to the business community. Moreover, one has a 'tertiarization of labour' within companies: management and clerical work account for an ever larger share of the jobs. Automation, the use of computers, is delaying the process, especially at the expense of the ordinary office workers.

Gershuny and Miles divide the service companies up into four sectors (rather than Katouzian's three):

1. Intermediate producer services: services to producers: legal and financial services architects' services, etc.;
2. Intermediate consumer services: a new sector comprising services to consumers

relating to the use of durable consumer goods: advice, mediation, repairs and infrastructural support in general. Automobile associations are a good example:

3. Final marketed services: services provided by companies or persons directly to the consumer: hotel and catering services, recreation, entertainment, domestic services, etc.;
4. Final non-marketed services: the services provided by the government, such as medical and social care and education.

According to Gershuny and Miles, the first two categories will become increasingly important. This will probably also be the case with the last category, but that depends on political decisions. The third service category, however, will decline in importance. The original optimism about the possibilities for increasing employment in the service sector has gradually given way to scepticism. In Germany there are those who speak of a Plafondierung: declining growth in service employment. It would appear that each of the three sectors is going to account for a fixed percentage of total employment. A serious tendency noted in the United States is that new jobs in the service sector are mainly poorly paid part-time jobs, the majority of which go to women.(19) A service economy of this kind is very far removed from the Utopian civilisation tertiaire described by Fourastié in 1949.

The course of future development as described by Fourastié was also criticized from an entirely different viewpoint. The economic history of the developing countries was found to follow a completely different pattern than that of Western Europe. For a long time economists assumed that the labour force had to shift by a 'natural' process, as it were, from agriculture to industry. Only after this had happened would it be possible for employment in the service sector to become predominant. This assumption was the result of over-concentration on the histories of a few industrialized countries, in particular Britain and Germany. In the developing countries, the industrial stage was 'skipped'; the migration from the countryside into the towns resulted in a shift in the labour force from the agrarian straight to the service sector. Because of this, economists are quick to characterize the service sector in the Third World as 'overstrained', making the economy top-heavy. Criticisms are aimed especially at the relatively large civil services and at street trading.(20)

Rightly, these criticisms of the developing countries have themselves come in for criticism. Yves Sabolo emphasized that there was indeed a large demand for services in the developing countries, and particularly for the new services, education and medical care.(21) The developing countries demonstrate that Fisher's theory that demand progresses in stages, from primary to secondary and then to tertiary products (22), is indeed not an iron law. Viewed from the position of those who have migrated to the cities, it is hardly surprising that work is sought in the service sector: jobs in industry are rare, they lack the knowledge and expertise needed to set up industrial enterprises of their own and only in the 'old' services, street trading and domestic services, can work be found quickly. It is often impossible to gain access to the established trade network because it is dominated by particular ethnic groups. Nobody denies, on the other hand, that a certain amount of underemployment exists in the 'old' services and in the civil service. However, few other possibilities are open to those concerned.(23)

Interesting in this context is the hypothesis put forward by some development economists working for the OECD (Organization for Economic Co-operation and Development) concerning the differences between the industry services ratios in the industrialized countries and in the Third World. Galenson, for example, suggested the possibility that a particular relationship exists in an economy between the number of jobs in industry and that in the service sector. For the developed countries he calculated a ratio of 1:1.7. In other words, each job in industry yields enough money to provide work for 1-2 people in the service sector. The ratio is different for the developing countries. The countries which are now industrialized built up their industry using relatively cheap labour. In the Third World, on the other hand, industry has immediately used the most modern, imported machines, which are operated by

relatively expensive labour. Wages in the service sector, however, are much lower there than they are in the industrialized countries, which means that one job in industry can create more employment in the service sector.(24) Just as in Europe where there was a surplus of cheap labour for industry, in the Third World there is a surplus of cheap labour for the service sector.

III. **A European Pattern?**

Compared to the United States and Japan, (Western) Europe had a rather large secondary sector during the last century. In a generalised form, it can be said that the European development was more 'exceptional than 'normal'. Kaelble in his article Was Prometheus most unbound in Europe puts forward a number of arguments to explain this.(25)

A. Like Great Britain in the 19th century, Europe is described as 'the workshop of the world'. Because industry was very much export-oriented, a relatively large number of people worked in this sector.
B. Europe's industrialization was labour-intensive, whereas, because of a shortage of labour, industry in the United States was more capital-intensive and made greater use of technology than European industry. This lead was considered as a result of the retarding and destructive effects of two world wars in the Old World.
C. Because of Europe's high population density, proportionally fewer people are needed to provide services than they are in larger and more thinly populated countries such as the United States, Australia and Canada. This applies particularly to the transport sector, but also, for example, to education.
D. In Europe there was a 'surplus' of young, unmarried women who could find employment mainly in industry. Factory work for women was more accepted in Europe than elsewhere.

Although this model seems to be applicable to Western Europe as a whole, it does not fit very well to other parts of the Continent. However, also within Western Europe some countries show a different pattern; e.g. Ireland, Denmark and the Netherlands deviate from the others (Great Britain, Belgium, France, Germany and Sweden).
Like many others, Kaelble pointed out that the Netherlands performed numerous services for the industrialized countries around it, especially of a financial and commercial nature, while shipping also contributed to the high percentage of workers employed in the tertiary sector. Leaving aside now the question how far this was true, it can be interesting to test the 'European' model by comparing the Netherlands with Germany. In this comparison Germany represents the more general (Western) European trend, where as the Netherlands stand for the deviations. Although the general picture of the European development is based on the outcome of industrial censuses, it is necessary to analyse in more detail the statistics more thoroughly. In particular, it will be shown that the occupational classification of these censuses, which were not used by the economists, were better sources than the industrial ones.
Although it will be beyond the scope of this article to discuss in detail the problems of the occupational censuses, some remarks about the German and Dutch census material have to be made. Both countries have compiled these censuses since the nineteenth century at fairly regular time intervals.(26) However, in the Netherlands, until 1909, and in Germany, until 1925, occupations were only classified according to the industries people worked in. This means,in particular, that it is difficult to count the occupations related to the services. After the second decade of this century also occupational classifications were used, but the classification system was not always consistent. For my purpose it was therefore a necessity to re-classify the occupations, to make them as comparable as possible both over time and between both countries.
An extra complication were the changes of the German frontiers throughout the whole

period. The Germany of before 1918 was not the same as the Germany after the Versailles treaty, and, additionally in the census of 1939 the areas occupied by the Nazi state were also included. The greatest problem, of course, was the division of Germany after the Second World War. For several reasons, only the statistics of the Federal Republic could be used and although the social and economic structure of the two parts of the former Reich were not very different before the war, it can be argued that the war and the post-war migration could have had different effects. Nevertheless, I believe that a comparison between the Germany before the War and the Federal Republic after the War can be made.

IV. **A Tertiary Lead in the Netherlands?**

If the three-stage theory of development is interpreted strictly, a country with a larger service sector has a lead over a country with a larger industrial sector. It has already been shown that this is not true in the case of the developing countries. The question is whether the theory is valid for Europe.

In some publications it is assumed on the basis of this theory that the Netherlands was ahead of the other European countries, and it is sometimes compared with the United States. Among those who have made this comparison is Brugmans, during the interwar years. Brugmans was clearly satisfied with the equilibrium between the three 'sectors': agriculture, industry and trade and transport. He did not express a preference for a shift towards predomination by the service sector.(27) Bairoch was explicit on this point and saw a direct relationship between the size of the service sector and the level of prosperity: 'It is notable that countries such as the United States and the Netherlands were also able to develop an important tertiary sector very early. In these cases the level of prosperity necessary for this was attributable to the natural resources and to the intensive trading activities , as a result of which transport (shipping) also became an important sector in the Netherlands at an early stage'.(28)

If we take the industrial classification we do indeed find that the industry services ratio in the Netherlands around 1920 corresponds most closely to that in the United States (table 1). After the Second World War, however, the two countries are found to have diverged enormously in their development. A shift has taken place towards industry in the Netherlands and towards services in the United States.

It is interesting to note that Sabolo, for example, interprets this as a process of catching up on the part of countries such as the Netherlands, Spain, Denmark, etc. In his view, these countries occupy an intermediate position between the developing countries and the developed countries.(29) Hence, the similarity between the Netherlands and the United States is illusory.

In this context it is interesting to look at some occupational groups for which comparable figures exist. If we regard a high percentage of clerical personnel as being characteristic of a modern service sector and a high percentage of domestic personnel as being characteristic of an old service sector, we find that the Netherlands lags behind the United States. In 1930 10.5 % of the labour force in service occupations in the United States were engaged in domestic work, while 22.5 % were engaged in clerical work. The Dutch figures for that year are 18.8 % and 12.9 % respectively. The corresponding figures for 1960 are 5.1 % and 27.2 % in the United States and 8.4 % and 22.4 % in the Netherlands. The comparison between the Netherlands and the United States points to a lagging-behind rather than to a tertiary lead on the part of the Netherlands.

How, then, can the existence of a large tertiary sector in the Netherlands be explained? The most familiar explanation, which has already been mentioned, is that the Netherlands exported services.(30) A comparison of the Dutch and German labour forces based on a well-known industrial classification indeed reveals that in 1920 the Trade and Transport sector (including financial services) was much larger in the Netherlands than it was in Germany: just over 20 % of the employed population as against 14 %, with the figures for both Trade and Transport about three percentage

points higher in the Netherlands.(31) This partly explains the difference in the sizes of the 'third sector'.
However, Miscellaneous Services also had a much larger share in the Netherlands. The difference here was due chiefly to the number of domestic employees. These accounted for 8.9 % of the employed population in the Netherlands, compared only 4.4 % in Germany.* These divergences between the two countries disappear in the course of time: by 1960 The Dutch service sector was only 8 % larger than the German one because of the growth in the 'second sector' (see table 2) during the reconstruction period after the war.
The other factor mentioned by Kaelble in his article as a cause of the volume of the secondary sector, a large number of women working in factories, certainly applies to Germany. If we assume, by way of an experiment, that the same proportion of women between the ages of 14 and 65 worked in industry in the Netherlands (following the industrial classification, we are not concerned here with 'white-blouse* personnel) the sector distribution there looks completely different. Roughly the same proportion of women were employed in service occupations in the two countries, but in industry the figures differed very considerably: 12 % as against 5 % (see table 3). In our experiment this means that 155,000 women are added to the Dutch labour force, with the result that the second and third sectors have become equally large in 1920. In 1960 the second sector would actually have predominated and the question of a deviant Dutch pattern would scarcely have arisen.
In view of this remarkable result it is time to ask whether the Netherlands did actually have a large service sector. If the men in the 14-65 age group are brought into the comparison as well as the women we find that the Dutch service sector was barely larger than the German one in relation to the potential labour force. Industry, however, accounted for a considerably smaller share than in Germany (see table 4). The reason that the Dutch service sector was so large compared to the industrial sector, therefore, has to do with the question of the small supply of female (married) labour in the Netherlands. Three explanations have been put forward:

a) The occupational censuses are inaccurate because people who worked at home are probably underrepresented in the Netherlands.(32)
b) The prevailing morality in the Netherlands was opposed to married women having jobs.(33)
c) The greater prosperity of the Netherlands made it possible to realize the middle-class ideal of the non-working married woman to a greater extent in the Netherlands than in Germany.(34)

As regards the first two explanations, there was also considerable opposition to working married women in Germany.(35) It was considered shameful for women with children to work at home, and here, too, statisticians complained that such work was not measurable.
In the interwar years preference was given mainly to the third explanation: 'This also explains why the Dutch workers can permit himself the luxury of keeping his wife for himself and the children and why the woman finds herself obliged to work for wages only in the rarer cases'.(36) And again the comparison with the United States is made: 'According to the international data of the German statistical office for the year 1928. nowadays the percentage of working women is even lower only in Australia (17.1 %). the United States of America (16.5 %). the Union of South Africa (12.0 %). Canada (11.5 %). thus all countries in which prosperity has reached a very high level'.(37) In surveys dating from that period too, it is repeatedly pointed out that, if married women work it is because they have to do so in order to raise the family income to an acceptable level; this applied both to German and to Dutch women.(38)

Our conclusion, though formulated with some caution, is, therefore, that the size of the Dutch service sector must not be overestimated. The 'deviant' pattern of the Netherlands was due in part to the large number of people employed in the occupat-

ional category Trade and Transport and the occupational group domestic personnel, but it also had to do with the fact that the relatively high level of prosperity enabled married women to avoid the double burden of housekeeping and factory work.
Having said this, we return to the thesis put forward earlier that the Netherlands lagged behind in the tertiary sector: in other words, that here the traditional service occupations predominated compared to the modern ones in industrialized Germany. As the term 'tertiary labour' is seldom defined explicitly, some clarifications seem appropriate.

V. **Prom an Industrial to an Occupational Classification**

As we have already observed, all of the aforementioned authors base their argument on an industrial classification. Occupational classifications are sometimes used, but only in very general terms. Gershuny, for example, predicts 'that the first occupational group in the ISCO classification (the "professional specialists") will become increasingly important in the future'. When considering that this occupational group includes teachers, doctors, higher technicians, artists, lawyers and clergymen his argument loses much of its value.(39)
The industrial classifications used by the authors referred to can not be 'translated' directly into an occupational classification. This is especially true because very important occupational groups such as clerical and managerial personnel are to be found in all companies, whether secondary or tertiary. Again, one has secondary labour which in an industrial classification takes place in tertiary companies. An example is the repair work carried out by such people as motor mechanics, plumbers and glaziers. This makes a new classification necessary.
Katouzian's criterion,i.e., his distinction between 'old' and 'new' services, appears to be highly suitable for this purpose, particularly as we are concerned in this study with 'lead' and 'lag', 'modern' and 'traditional'. Modern services to the business community are the type of services which mark the affluent society: large numbers of clerical personnel (office workers in companies and employed by the government), teachers, social workers, doctors, nurses and persons engaged in 'body care', such as hairdressers, sports instructors and beauty specialists.(40) A modern service sector, then, is characterized by a high percentage of clerical and technical personnel, many doctors, teachers, etc. A high percentage of domestic personnel, on the other hand, is a typical characteristic of a 'traditional' service sector.
It is difficult to tell with many occupational groups whether they are traditional or modern. Examples are trading occupations, managerial jobs, transport workers, the legal profession, cleaners and artists. Despite all the limitations of the occupational censuses, modern and traditional occupations can nonetheless be identified within these groups. Examples of modern occupations include insurance agent, sales representative, accountant, driver, pilot, laundry worker (up to the Second World War), telephone operator, telegraphist, doorkeeper, beauty specialist and hairdresser. Traditional occupations include hawker, peddlar, waggoner, carrier, delivery man, clergyman, sexton, coachman, etc.
In the following, where possible the Dutch and German service sectors will be compared, not only at the level of the twenty aforementioned occupational groups, but also at the level of the occupations themselves.
First, an overall impression will be given of the development of the three sectors according to an occupational classification. In this classification the primary sector comprises only farmers, agricultural workers, horticulturalists, fishermen, foresters, etc.; in this sector the differences between the occupational classification and an industrial classification are negligible.
The secondary sector comprises only those who are involved directly in the manufacture of products: the workers and the self-employed in industry. Mechanics and others engaged in repair work are also included in this sector because their work does not differ essentially from that of the others in the sector.

The third sector comprises all those who are engaged in the production of intangibles. In accordance with the ideas of Fourastié, therefore, managerial personnel and office workers in industry are included in the tertiary sector.(41) The other occupational groups in the sector are those which one would expect to find in it.
It is striking that, whereas the secondary sector was still the largest in Germany after the First World War, the service occupations had already become equally large prior to the Second World War. According to the industrial classification, the service sector did not overtake the industrial sector until the 1970s. We also note that the wide divergence between the Nether- lands and Germany was narrowed particularly in the post-war years. Thus, the war delayed changes in the sector distribution.

VI. **Traditional and Modern Service Occupations**

Measured in relation to the total population aged between 14 and 65, the Dutch service sector was hardly larger than the German one. For this reason, it does not seem meaningful to express the size of service occupations as a percentage of the total labour force. Moreover, this would result in a distortion of reality because the number of female workers is too low in the Dutch censuses. It is more appropriate to measure the importance of the different occupational groups in relation to the labour force employed in the service sector. This means that small occupational groups, such as artists, lawyers and clergymen, are also accounted for.
I shall now go on to indicate and discuss the size and growth rate of each of the twenty occupational groups. In doing so, the emphasis will be on the question of whether the Dutch service sector was traditional or modern by comparison with the German service sector. A second matter which will be examined is the extent to which a variety of modern services were already important before the Second World War (see table 6).
The first important occupational group is the one comprising architects, engineers and technical staff. This group was substantially larger in Germany until after the Second World War. It grew fairly rapidly in the Netherlands (6% per annum) but the growth probably stopped during the Depression of the 1930s. In Germany a reduction between 1925 and 1933 in absolute terms, and only a slight recovery was recorded in the years before the war. The 1947 census for the Netherlands is not very reliable. In view of the absolute fall in the number of engineers, architects and technical personnel there are no grounds for assuming that the gap had already been closed immediately after the war. This happened only during the 1950s, and is attributable mainly to the rapid industrialization of the Netherlands which expanded the secondary sector to an unprecedented size in 1960. The low level of industrialization in the Netherlands in the earlier period is reflected in the small amount of interest shown in university courses in the exact or technical sciences: between 1930 and 1947 the percentage of graduates in such subjects was lower than that in any other university course. (A striking parallel with the developing countries.)
The second occupational group, that of writers and university staff, exhibits the strongest growth in the Netherlands, where it grew from 0.2% in 1920 to 0.8% in 1960. The high figure for Germany in 1950 - 0.6% - might be connected with the partition of the country. After 1950 the Netherlands seemed to lead in this field.Unfortunately, it is impossible to follow this development in the seventies since the Dutch Statistical Office did not publish the outcome of the occupational census of 1971 until now, and the 1981 census never was held.
A notable feature as regards the next two groups, teachers and medical personnel, is the high figure in the Netherlands in 1960: 10% in total, compared to 6.8% for Germany. Naturally, these groups grew rapidly after the war, but not as rapidly as one might have expected on the basis of the literature. They were already important occupational groups in the interwar years: 7.8% of the total employed in the service sector in the Netherlands in 1920 and 6.6% in Germany. Certainly in the Netherlands, 'mass consumption' of these services already existed before the welfare state came into being. Measured against the total population, the Netherlands had, in 1947,

reached the level attained by Germany in 1961, while, in 1930, it was already at the German level of 1950 (see table 7).

During the interwar period it was thought that the relative wealth of the Netherlands was a cause for the important position of the social services.(42) This explanation was also used for the low percentage of working married women. Although this seems to be quite plausible, other factors influencing mass-consumption of education and other social services must have played a role, too. Demographic factors (the relatively high birth rates and low death rates; in particular for children and infants) and political factors may have contributed to this situation. The 'pillarization' of Dutch politics with great autonomy for different religious and political groups created a situation in which it was not too difficult to start a variety of schools.

The next group, that of lawyers and accountants, was very small: roughly a half per cent of the total employed in services. No notable increase occurred in this group after the war. In the case of accountants, it was in the interwar years that an enormous annual growth rate was recorded. The rate in the Netherlands in the period 1920-1930 was 9%; in the period 1925-1939 in Germany it was as high as 18%.

The clergy was another small group. Whereas its importance did not diminish in the Netherlands between 1920 and 1960, there was already a slight decline in Germany immediately after the Second World War. It should be noted when comparing the two countries that in the Netherlands monks and nuns were classified according to their occupation, which means that a large number of them are included in the medical and teaching occupational groups. In Germany they were always counted as clergy, which makes it impossible to compare them in both countries.

The group made up of practitioners of the visual arts and performing artists has tended to become smaller in relative terms rather than larger, although it was thought by the experts that this group must be growing.(43) Measured against the total population - after all, they supply services to the consumer - there was a slight increase in the interwar years, but a decline after the Second World War. Further growth of this group was impeded by cinema and radio. An interesting illustration of the change in their position is that in 1920 the note 'excluding musicians' was appended to 'cinema personnel*.

The management occupational group exhibits little increase in the Netherlands and large fluctuations in Germany. The rather important, diminished percentage of managers between 1925 and 1939 can be explained partially by the growing influence of the state in Germany during the Nazi period, although at the same time it seems odd that this should happen in a society whose official ideology stressed the leadership principle. The high percentage (7%) in the census of 1950 is beyond all doubt caused by another criterium. Higher civil servants, normally classified with administrative personnel, were grouped into the managerial class in that year. This decision explains also the low percentage of administrative personnel in 1950. The changes in this occupational class are too vast to arrive at a reasonable comparison with this group in the Netherlands.

More interesting is the large occupational group made up of clerical workers. Germany was ahead of the Netherlands here throughout the period 1920-1940. The group began to expand strongly in the Netherlands only after the Depression, and by 1960 the two countries were on a level.

The group comprising the trading occupations, also a large one, does not exhibit many fluctuations, except for a striking decrease in Germany in 1939. A possible explanation is that the structural surplus of small shopkeepers after the First World War had disappeared as a result of the economic policy of the National Socialists. A similar surplus also existed in the Netherlands: between 1920 and 1930 the number of shopkeepers increased by 64%. The assumption of the Central Bureau of Statistics, that this increase was chiefly the result of the fact that the census forms were filled in better by other members of the family working in the shop, is unacceptable because the number of men in this group also increased by 64%.(44) There are indications that a typical characteristic of developing countries, extensive street trading ("petty trade*), was also to be found in the Netherlands. In 1920 hawkers,

door-to-door salesmen and other street traders accounted for about 15% of the total number of people engaged in trading, whereas in Germany the corresponding figure in 1925 was only 3-4%. Their number increased enormously in the Netherlands: the 1930 figure was double that of 1920. We see the same phenomenon in Germany. In 1933, there were estimated to be 60,000 in Berlin alone, which was equal to the total for the whole country in 1925.(45)

Not only was the 'traditional' occupation of hawker more important in the Netherlands than in Germany in 1920; so, too, was the modern occupation of commercial traveller. The latter accounted for 13% of the total labour force engaged in trading, a figure which was not to be reached in Germany until the 1930s.

The occupational group 'transport and communication' comprises all sorts of different occupations each of which developed differently. The most notable development was the disappearance of drivers of horse-drawn vehicles and the extremely rapid rise of drivers of motor-vehicles. In the Netherlands the ratio in 1920 was still 3:1. By 1930 the situation had already been reversed (3:7), while immediately after the Second World War the drivers of horse-drawn vehicles constituted an steadely decreasing minority, with the ratio at 1:9. The ratios in Germany were 3:2 in 1925, 1:3 in 1933, 1:6 in 1939 and, again, 1:9 in 1950. The number of drivers of motor-vehicles continued to grow rapidly in the 1950s, so much so, that other transport occupations, such as sailor, waggoner and engine driver, became increasingly a minority (table 8). This also affected the other occupations in the transport sector, which accounted for a smaller proportion of the service labour force after the Second World War in comparison to the pre-war years.

Unfortunately, no figures are available for the modern communication occupation, such as telegraphist and telephone operator, in Germany before the Second World War. In the Netherlands there was a marked stagnation in these occupations, with growth taking place only after 1947, especially in the case of telephone operators. The traditional occupations of messenger and delivery man were still exhibiting substantial growth in the 1920s; only after 1947 did their number begin to fall below the 1920 level.

The proportion of transport workers such as porters, warehousemen, etc. remained fairly constant in Germany. In the Netherlands, however, their share shrank as the importance of the transport sector as a whole declined. The explanation might be that in Germany most of them were working in industrial companies, whereas in the Netherlands the majority were employed in the transport sector (according to the industrial classification), as dockers, for example. From the percentages, moreover, it is apparent that the estimate of their number in 1925 was too low rather than too high.

The occupational group comprising members of the armed forces and the police is intriguing, especially for the interwar years. The decline in military personnel in the Netherlands and its rapid growth in Germany confirm everything that has already been said about the pacifism of the Netherlands and militarism of Germany. It is also interesting to note that the annual growth in the German armed forces between 1933 (when Hitler came to power) and 1939 was not greater than it was between 1925 and 1933: 10.4%. Nevertheless (unfortunately one would say) made it the most rapidly growing occupational group in Germany. The post-war percentages of this group for Germany are too low because members of the armed forces are excluded.

An interesting development as regards the cleaning and guarding group of occupations is the growth of laundry workers in the interwar years, which was followed by stagnation after the war. While still representing a very modern sector after the First World War, and one in which mechanization took place on a large scale, thus replacing the washerwomen of earlier days, after about 1950, the laundries in turn had to make way for the advent of the washing-machine in private homes. This has become a classic example of Gershuny's 'self-service economy'.

The smaller occupational groups of hotel and catering personnel, hairdressers and beauty specialists, etc., which are sometimes presented as an example of the 'mass consumption' of modern services do not deserve this reputation. With the exception of

the Netherlands in 1947, little movement can be detected in these occupational groups between 1920 and 1960. The rapid growth in the number of hairdressers, pedicurists, masseurs, bath attendants, beauty specialists, etc. in the Netherlands and Germany (7.5% and 7.7% per annum, respectively) was halted by the Depression, and in the Netherlands there was virtually no growth after that.

Whereas clerical workers were more important in Germany than in the Netherlands, the reverse was true of domestic personnel. The big difference between the two countries as regards the domestic occupational group continued to exist after the Second World War. It is this difference which provides the chief grounds for describing the Dutch service sector as 'traditional'. In this context, mention must certainly be made of the large-scale migration of German girls to work in Dutch households in the interwar years: the only practical solution to the 'servant problem' of that time. Attempts to overcome the shortage of domestics by introducing a sort of 'Taylorism' or division of labour (girls would do the same, specific job in a large number of homes and, hence, would continually have to travel from one home to the next) were abortive. This occupational group may serve as a model supporting the view that it is difficult to raise the productivity of labour in the service sector because the result is that such labour eventually becomes too expensive and disappears because of the introduction of technology into housekeeping (vacuum cleaners, washing-machines, dishwashing machines, etc.).

The importance of the last group, 'other services', lies chiefly in the fact that it contains the 'unclassifiable occupations'. The occupations thus classified by the Central Bureau of Statistics reveal an important shortcoming of occupational censuses: it is not possible to predict for modern, but still unimportant occupations whether they will become important in the future. In 1920, for example, we find in this group tax consultants, psychologists, propagandists (political parties), canvassers, playing field workers and professional sportsmen alongside more obscure occupations such as 'medium', 'astrologer' and 'fortune-teller'.

VII. **Conclusions**

During th economic crisis of the 1930s' a general theory of economic development came into existence. In this theory economic activities were split up into 'primary', 'industrial' or 'secondary' and 'service' or 'tertiary' activities. The general idea was that in countries over time a shift should take place from the 'primary' sector over the 'secondary' into the 'tertiary' sector. Although after the Second World War some modifications of this theory were made, the general economic development seemed to prove this theory. In particular during the 1970s' attention was laid on the 'tertiarization' of labour and the result this would have for society.

Within the general framework of the theory Europe seemed to lag behind. Labour in the secondary sector dominated here. From a historical standpoint this was not new. Also during the nineteenth century manpower in industrial activities were relatively more important in Europe than e.g. in the United States of America. Kaelble in his article 'Was Prometheus mostly unbound in Europe' tries to give an explanation for this situation.

Europe, however, was not homogeneous. Already within Western Europe, important differences in the economic development can be detected. Great Britain, as the world's first industrializing country, and Belgium and Germany, as early or rather early industrializes, seem to testify the theory. Other countries, like Ireland, Denmark and the Netherlands doesn't seem to do so. In literature in particular the Netherlands is seen as a country with a traditional strong service oriented economy. Dutch statisticians and economists from the Interwar period already stressed this and others did so too. Looking more thoroughly into the statistical material some doubts arise, about this position. The importance of the service sector seemed to be less influantial than expected and the sector as such was more 'traditional' than 'modern'.

The development of the Dutch economy, and in particular of the service sector, can

be described rather well by comparing the developments in Germany and the Netherlands. To summarize, there are four things which stand out. The first is that the Dutch service sector was indeed more traditional than the German one. This applies especially to the domestic, technical and clerical occupational groups which together account for roughly a third of the total labour force in the service sector. The Netherlands also seems to be somewhat more traditional as regards other occupations. The growth percentages generally tend to be lower, but - and this is the second thing that stands out - in both countries the modern services were already coming strongly to the fore before the Second World War. Waggoners, etc. were fast disappearing; modern road haulage was displacing rail transport and shipping. Modern occupations such as hairdresser, accountant, laundry worker, commercial traveller, etc. were expanding rapidly. Some of them were already past their peak before the Second World War. Education and medical services already accounted for a substantial share of the labour force in the pre-war years.

The other side of the coin is that in both countries we find that the percentages of small shopkeepers and 'Depression traders' are much too high. Messengers and delivery men, also 'traditional' occupations, are more numerous than telephone operators and telegraphists whose number increased only after the war.
Finally, the fourth feature worth noting is that a number of occupational groups which one would expect to become important especially in the affluent society scarcely increase in significance. This applies particularly to performing and visual artists and to hotel and catering personnel.

APPENDIX: A Occupational Censuses in Germany and the Netherlands 1880-1980(46)

Germany	the Netherlands
1882 (Industrial census))	1889 (Census)
1895	1899
1907	1909
1925 (Census)	1920
1933	1930
1939	----
1950	1947
1961	1960
1970	1971
1973 (Mikrozensus)(47)	1975 (arbeidskrachtentelling)(48)
1978 (idem)	1977 (idem)
1980 (idem)	1979 (idem)
1982 (idem)	1981 (idem)

NOTES

(1) The Research for this study was partially financed by the German Stiftung Volkswagenwerk. I am very grateful for the assistance of Wibo Verstegen.

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Table 1. *Employment in the service sector as a percentage of total employment (1920-1960).*

Belgium	1920	0.69	1961	0.97
Germany	1925	0.70	1961	0.80
Sweden	1920	0.91	1960	0.91
U.K.	1921	0.95	1961	1.03
France	1921	0.99	1962	1.10
Spain	1920	1.10	1960	0.87
The Netherlands	1920	1.14	1960	1.11
Norway	1920	1.19	1960	1.21
Denmark	1921	1.41	1961	1.26
U.S.A.	1920	1.11	1960	1.66
Japan	1920	1.10	1960	1.43

Source: Y. Sabolo, *Service Industries*. Geneva (ILO), 1975,6-9, 17,18,200. *(Industrial classification)*

Table 2. *Industrial classification of the employed populations of the Netherlands and Germany, 1920-1961.*

The Netherlands

	1920	1930	1947	1960
Agriculture	23.6	20.6	19.3	10.7
Industry	35.6	36.4	36.9	42.4
Trade	12.8	14.8	14.2	16.1
Transport	8.0	7.5	6.7	7.0
Misc. Services	20.0	20.6	22.9	23.8

Germany

	1925	1933	1950	1961
Agriculture	30.5	29.0	22.3	13.4
Industry	41.4	40.4	43.0	47.2
Trade	9.6	11.2	9.9	13.5
Transport	4.7	4.6	5.3	5.5
Misc. Services	13.8	14.8	19.6	20.3

Source: *The Fontana Economic History of Europe. Contemporary* **Economics**. 2, Glasgow, 1976, 657-666.

Table 3. *Employed females in the Netherlands and Germany as a percentage of the total female population in 14-65 yr. per occupational sector (occupational classification)*

The Netherlands

	1920	1930	1947	1960
Agriculture	4	4	5	1
Industry	6	5	5	5
Services	19	20	20	20
Total	29	29	30	26

Germany

	1925	1933	1950	1961
Agriculture	21	19	17	10
Industry	12	12	10	12
Services	16	19	19	28
Total	49	51	46	50

Table 4. *Employed populations of the Netherlands and Germany by occupational sector (Occupational Classification) as a percentage of the total population aged 14 years or more.*

The Netherlands

	1920	1930	1947	1960
Agriculture	15	13	12	6
Industry	21	21	20	22
Services	27	28	27	30
Total	63	62	59	58

Germany

	1925	1933	1950	1961
Agriculture	22	18	16	10
Industry	27	26	25	27
Services	24	26	24	32
Total	73	70	65	69

Notes: **For the The Netherlands in 1947 3% of the total employed population was temporary non-working and for the Federal Republic in 1950 3% of the total employed population was registered as unemployed.**

Table 5. *Occupational breakdown of the Dutch and German service sectors.*

	The Netherlands				Germany			
	1920	1930	1947	1960	1925	1939	1950	1961
01	1.2	1.6	1.4	5.1	5.8	4.9	4.9	6.9
02	0.2	0.3	0.4	0.8	0.3	0.3	0.6	0.6
03	2.6	2.7	3.4	4.2	3.0	2.7	4.3	3.8
04	5.0	4.9	4.9	5.6	3.3	2.7	3.4	3.1
05	0.3	0.4	0.5	0.6	0.2	0.4	0.6	0.5
06	0.8	0.9	0.6	0.5	1.0	0.9	1.0	0.6
07	0.6	0.5	0.8	0.7	0.7	1.2	0.9	0.6
I Professions	10.7	11.4	11.9	17.3	14.3	12.9	15.6	16.0
II Management	5.3	5.3	4.8	5.9	3.3	2.7	7.7	5.6
08	5.3	5.3	4.8	5.9	3.3	2.7	7.7	5.6
09	11.3	10.8	18.9	22.8	18.2	21.0	14.8	22.3
11	3.4	2.8	3.6	1.5	3.0	1.5	2.2	2.2
III Officeperson.	14.7	13.6	22.5	24.3	21.2	22.5	16.9	24.4
IV Trade 10	15.4	18.5	20.6	18.2	17.5	12.0	16.9	16.3
12	11.5	10.3	7.9	8.5	9.6	11.9	10.9	9.7
13	11.6	12.5	8.7	5.9	9.6	11.9	10.2	9.9
V Transport	22.1	22.8	16.5	14.4	19.3	23.8	21.1	19.6
14	2.4	1.6	2.3	3.1	1.0	3.4	1.4	1.2
15	1.1	1.0	0.8	1.4	1.3	1.6	1.9	1.7
16	1.9	1.7	1.4	1.3	3.1	3.8	3.4	5.0
18	3.3	3.6	5.3	3.5	3.4	3.1	3.5	3.6
19	0.9	1.5	1.5	1.3	1.1	1.4	1.7	1.9
20	0.5	0.7	0.6	0.9	0.6	0.6	1.2	0.8
VI Other Services	10.0	9.7	11.9	11.5	10.5	13.9	13.2	14.1
VII Household Services								
17	20.8	18.7	11.8	8.4	14.0	12.2	8.6	4.0

Index of Dissimilarity

The Netherlands (1920) Germany (1925) = 18
(1930) (1925) = 15
(1947) (1950) = 17
(1960) (1961) = 13

01 - Architects, Engineers, Technical Staff
02 - Authors, Academic Staff, Journalists
03 - Medical Personnel, Nurses
04 - Teachers, Welfare Staff
05 - Legal Advisers, Judges, Accounting people
06 - Priests
07 - Artists
08 - Management
09 - Administration
10 - Trade
11 - Banking and Insurance
12 - Transport and Communication
13 - Transport-Related Activities
14 - Military
15 - Police, Firemen
16 - Cleaning
17 = Housekeeping
18 = Waiters
19 = Haircutting, Bath Intendent etc.
20 = Rest

Table 6. *Numbers employed in occupations serving consumers (as opposed to trade and industry) per thousand inhabitants.*

	The Netherlands 1920	Germany 1925
Teachers, Welfare Workers	4.5	5.5
Medical Personnel	8.4	5.1
Artists	1.0	1.7
Clergymen	1.3	1.2
University Staff, Writers	0.4	0.5
Launderers	1.6	0.7
Hotel and Catering personnel	5.6	5.7
Hairdressers etc.	1.5	1.9
	22.3	24.3
Domestic personnel	35.1	23.8

	The Netherlands 1930	Germany 1933
Teachers, Welfare Workers	5.3	4.5
Medical Personnel	8.7	5.2
Artists	1.0	1.9
Clergymen	1.7	2.1
University Staff, Writers	0.6	0.5
Launderers	2.0	1.2
Hotel and Catering Personnel	6.5	6.0
Hairdressers etc.	2.7	3.6
	28.5	25.0
Domestic personnel	34.5	18.7

Table 6. *Numbers employed in occupations serving consumers (as opposed to trade and industry) per thousand inhabitants.*

	The Netherlands 1947	Germany 1950
Teachers, Welfare Workers	6.3	6.8
Medical Personnel	8.4	5.4
Artists	1.4	1.5
Clergymen	1.0	1.5
University Staff, Writers	0.7	0.9
Launderers	1.4	1.3
Hotel and Catering personnel	9.2	5.5
Hairdressers etc.	2.6	2.8
	31.0	25.7
Domestic Personnel	20.4	13.9

	The Netherlands 1960	Germany 1961
Teachers, Welfare Workers	8.2	8.3
Medical Personnel	10.4	6.6
Artists	1.3	1.3
Clergymen	0.9	1.2
University Staff, Writers	1.5	1.5
Launderers	1.5	2.6
Hotel and Catering personnel	6.6	7.8
Hairdressers etc.	2.3	4.0
	32.7	33.1
Domestic personnel	15.8	8.7

Table 7. *Employees in Transport in the Netherlands and Germany 1930-1960* *

	The Netherlands	Germany
	1930	1933
Shipping	49.5	16.7
Railways	9.1	15.5
Waggoners and coachmen	12.2	21.8
Cardrivers	29.2	46.0
Pilots	0.2	?
		1939
Shipping		16.5
Railways		17.2
Waggoners and coachmen		9.6
Cardrivers		56.3
		0.3

	1947	1950
Shipping	39.9	8.4
Railways	5.5	12.2
Waggoners and coachmen	5.1	6.2
Cardrivers	48.2	72.5
Pilots	0.3	0.7
	1960	1961
Shipping	34.6	7.6
Railways	3.	11.2
Cardrivers	61.8	79.3
Pilots	0.5	2.0

Shipping - Officers, saylors, a nd engineers
Railways - Conductors, and engineers